

Secretary Cohen briefing
defense budget.



DOD (P.D. Ward)

commentary

WHY NO TRANSFORMATION?

By ANDREW F. KREPINEVICH, JR.

Given the enthusiasm for transformation, why does the Pentagon hew to a modernization plan that will leave the military on the near side of the coming transformational divide, prepared to address old challenges far better than those now emerging? There is no single source of the problem. Only by examining a range of factors can we draw tentative conclusions.

Success Breeds Complacency

Just ten years ago the Armed Forces won the Cold War, emerged victorious in a lopsided campaign in the Persian Gulf, and became the pre-eminent military in the world. This dominance, together with a defense

budget that dwarfs those of all other nations, has led some to conclude that only the United States is fiscally and technically able to effect a large-scale leap in military affairs. Thus, while paying routine lip service to transformation, the defense establishment has adopted the Wells Fargo approach to the problem: move in slow stages.

This gradualist approach worked during the Cold War when the threat was well known and technology progressed at a leisurely pace. But this condition no longer obtains. As leaders peer into the coming century, they confront dramatic challenges: electronic strikes against a blossoming information economy, precision attacks with smart weapons, large-scale use of

ballistic and cruise missiles, and war in space. Such developments will transform warfare—and require a transformed U.S. military.

Although the Pentagon has been slow to match the call for transformation with action, the American public has been generally indifferent to defense matters in one opinion poll after another. Consequently, some members of Congress appear more concerned over the economic implications of defense allocations in their districts than with national security. Furthermore, President Clinton has not provided significant leadership for transformation, let alone brought pressure to bear.

This inattention is regrettable since transforming any large organization often takes decades. Therefore the military finds itself in a race against time to effect a transformation more quickly than competitors can acquire

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F-15s awaiting departure to Turkey for Northern Watch.

1st Combat Camera Squadron (Jack Braden)

asymmetric means capable of defeating the American way of war. What is missing is a sense of urgency.

Refighting the Last War

Lacking a clear challenge militaries can fall into the trap of anticipating that the next war will resemble the last. Unlike other large competitive organizations, the U.S. military obtains feedback on effectiveness rather episodi-

preparing to refight the last war is seductive because it presents an illusion of certainty

cally. Its last major conventional war data point was the Gulf War in 1991. The natural tendency is to baseline performance against the Gulf experience. Much of the wargaming that supported the Bottom-Up Review in 1993 and the more recent Quadrennial Defense Review (QDR) was oriented toward contingencies such as the Persian Gulf and Korean peninsula.

Depending on a ten-year-old conflict to determine force structures for future contingencies seems unlikely to provide the insights needed for transformation. This is particularly true in power projection, where traditional methods of deploying land and air forces through ports and airfields

is certain to be held at risk by the proliferation of satellite services and missile technology.

Preparing to refight the last war is seductive because it presents an illusion of certainty. It does not challenge existing service cultures: armored combat on land, carrier battle groups at sea, and tactical fighters in the air. Yet if some observers are correct, it will be extremely difficult to rapidly deploy heavy Army forces to threatened regions. And it will be hard to move large surface com-

batants through narrow choke points such as the Strait of Hormuz or base short-range tactical aircraft in those areas. In short, service cultures will be eroded as the transformation occurs.

Nor does the promise of a revolution in military affairs make the warrior class necessarily comfortable. Satellites so critical for military operations, for example, are controlled by personnel in air conditioned rooms located thousands of miles from trouble spots. This revolution is likely to place ever greater emphasis on unmanned aerial vehicles and less on manned cockpits, threatening the prevailing culture of the Air Force. Information warriors who defend electronic infrastructure while trying to undermine an enemy could be seconded from Silicon Valley, and may

not even be forced to leave their snug corporate cubicles. Traditional warriors will always be essential, but as transformation proceeds they are likely to increasingly rely upon—and in some cases be displaced by—distinctly non-warrior elements. If history is any guide, the combat culture will prove reluctant to accept a growing role for such nontraditional warriors.

Short Tenure of Senior Leaders

Military innovations and transformations in the United States during this century have been largely characterized by support from senior leaders whose tenure was typically longer than those of today. This makes sense since revolutions occur over many years. Admiral William Moffett, who headed the Bureau of Aeronautics during the early years of naval aviation, served in that post from 1921 to 1933. Admiral Hyman Rickover, father of the nuclear program in the Navy, led that effort for several decades. General Hamilton Howze, the leader in creating the only new division in the Army over the last half century—the Airmobile (Air Assault) Division—served in positions directly related to air mobility for nearly a decade.

Individuals also matter in transformations. The choice of General Hans von Seeckt to head the German army following World War I, as opposed to General Walter Reinhardt, was crucial to *Reichwehr* development of *Blitzkrieg*. General von Seeckt had a vision of military transformation centered on elite, highly mobile forces while Reinhardt believed static warfare would dominate in a future conflict as it had on the Western Front. Moreover, von Seeckt served for seven years in his position, allowing time for his vision to take root.

Had Admiral Jackie Fisher not been First Sea Lord from 1904 to 1910, it is doubtful the Royal Navy would have moved so aggressively to divest itself of 150 ships of the passing military regime while moving ahead with *HMS Dreadnought* and fast battle cruisers, dramatically changing Britain's forward presence.



Marines in attack during exercise, Twentynine Palms.

2nd Marine Division, Combat Camera Unit (Andrew T. Thornton)

Today the opportunity to institutionalize a process for change is more elusive. Senior officers shuttle from one assignment to the next, completing touch-and-go tours in one or two years. Four years is the maximum time an officer can serve as Chairman or service chief. Thus leaders barely have time to enunciate a vision of transformation, let alone institutionalize a process to achieve it. Short tenures also stress near-term problems and solutions. Most people are naturally concerned that nothing goes wrong on their watch. They also want to point to clear accomplishments when they depart. One suspects they are loath to start something whose fate will depend upon the good will of their successors.

Antiquated Tools

Most analytic methodologies for determining military requirements were developed during the Cold War, including wargame models which influenced QDR deliberations. Some models are highly limited in their ability to incorporate the information dimension of

warfare, which is helping to drive the need for military transformation.

Reflecting their Cold War heritage, these models tend to emphasize attrition (as opposed to maneuver) warfare and linear operations along

whereas generating maximum near-term efficiencies may be realized by assuming away uncertainty, it risks planning for the wrong future

well-defined front lines—characteristic of the sort of operations that many anticipated twenty years ago if war erupted between the Warsaw Pact and NATO. But many no longer see future war resembling these operations and view legacy models as unhelpful at best and likely counterproductive. In short, current models with their focus on past forms of warfare are biased toward traditional operations and are barriers to transformation.

To determine requirements, the Department of Defense also continues

to place great reliance on systems analysis, which was instituted by Secretary of Defense Robert McNamara in the 1960s. Systems analysis emphasizes cost-effectiveness to arrive at the most efficient solutions. It focuses on the six-

year period covered by the Future Years Defense Plan. This approach may have worked when the threat was immediate. But the twin geopolitical and military-technical revolutions that are the basis for transformation have led to higher levels of uncertainty for military planners. Whereas generating maximum near-term efficiencies may be realized by assuming away uncertainty, it risks planning for the wrong future.

Simply put, a defense plan that is very efficient for a specific future may produce a very ineffective military if that future does not materialize. The Maginot Line, which France built in

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the interwar period, might have been both an efficient and an effective use of defense resources had the static trench warfare of World War I dominated in 1940. But when it became clear that *Blitzkrieg* was the future, and not *redux* of the Western Front, the French were left with no viable alternatives against the German onslaught. Today, systems analysis may help determine an efficient mix of the tactical aircraft in the Pentagon modernization planning, which is based primarily on Gulf War-era contingencies. But as currently practiced, it may not capture the uncertainties of the longer term, or post-transformation, competitive environment. As the threat to forward bases increases, the value of tactical aircraft—expected to remain in the inventory for decades—may depreciate rapidly, thus leaving the Armed Forces with relatively ineffective air forces.

Training and Budget

Field exercises are the ultimate wargame, approximating the experience of war as closely as possible. Past exercises were critical to transformation. The Navy could not have developed the principles of carrier battle group operations without the fleet problems undertaken during the 1920s and 1930s. Germany, in perfecting *Blitzkrieg*, relied on field experiments. Moreover, after its disarmament following World War I, the German army carefully studied field experiments by other militaries, especially the British, while secretly testing tanks and aircraft in the Soviet Union.

Unfortunately, U.S. field exercises are rarely joint and typically not concentrated on post-transformation operational challenges, such as projecting power in the absence of forward basing. In addition, as one commander observed, they are often conducted to validate accepted operational practices, not to experiment with new ways to fight. U.S. Joint Forces Command is responsible for joint experimentation. Its ability to focus experiments on the post-transformational challenges outlined above and to translate results into changes in defense funding remains to be seen.

Air defense artillery in Alaska, Northern Edge 2000.



354th Communications Squadron (Mark Bucher)

The FY00 defense budget of \$289 billion may seem adequate to support transformation at minimal risk to near-term readiness. It far exceeds that of any other nation, and by some measures exceeds the budgets of all other great powers combined. Yet transformation is linked to the shape of defense investments as well as their magnitude. France led Germany in expenditures for most of the interwar period. Yet Germany transformed its military to execute *Blitzkrieg* and vanquished France in six weeks. The Depression constrained naval developments in the United States during the same period. Nevertheless, the Navy laid the groundwork for the carrier-dominated battle fleet while Japan accomplished a comparable feat with an industrial base that was less than one-fifth the size of America's. Sadly, current budget debates frequently revolves around the question of how much is enough to sustain a smaller but similar defense program. A more important question is how wisely investments are being made to transform for very different security challenges.

The budget problem is being aggravated by volunteer's dilemma, a result of a program that cannot be sustained by current and projected budgets and a national security leadership that favors near-term capability over long-term readiness. To resolve

this mismatch modernization funds have continually shifted to current operations. This undermines service efforts at transformation. When the Navy volunteered to drop below authorized fleet size in 1994 in order to free funds for future capabilities, officials skimmed off much of the anticipated savings to reduce budget shortfalls.

This lesson was not lost on senior leaders. When it came time for QDR, the chiefs quickly realized that the process was primarily a budget-cut drill intended to balance the program-budget mismatch. Consequently, the services sought to protect their existing programs and forces rather than risk their budget share by reducing near-term capabilities for transformation. Given this incentive, it is no wonder that the QDR process produced very little innovation. Of course, should senior leaders themselves attempt to restructure the budget to support transformation, they would likely face resistance from the Office of Management and Budget and ultimately the congressional authorization and appropriation process. Yet the President as Commander in Chief and Congress in its role of supporting the Armed Forces have clear responsibilities to nurture the transformation for which they have been calling.

Defense Acquisition

With few exceptions, the defense acquisition system is oriented on Cold War, large-scale, serial production. Yet successful military transformation over the last century was characterized by avoiding system *lock in* during periods of rapid technological progress and high uncertainty while promoting *wildcatting*. The former term refers to buying large quantities of long-life equipment whose value may decline rapidly during a shift in military regimes, such as battleships during the interwar era. The latter pertains to broad experimentation with limited levels of emerging systems to identify their prospective value in the post-transformation regime, such as the four classes of carriers (but only six carriers in all) the Navy built in the interwar years, and the sixty-plus types of attack aircraft the Army Air Corps experimented with during the same period.

Certainly buying in bulk keeps unit costs down, important for a force structure too large for the modernization planned by the Pentagon. Correspondingly, canceling any new system with its substantial research and development costs is anathema to the services. Indeed, program managers are evaluated primarily on their ability to move systems into large-scale production. This produces bias against the kinds of risks that lead to innovation as opposed to safe design choices. Thus the incentives to reduce costs, while laudable, can undermine transformation by limiting wildcatting and promoting lock in.

The ability of the acquisition system to support transformation also suffers from a shift in the size and nature of the industrial sector which sustains it. When the demand for defense products declined dramatically as the Cold War ended, the industrial base was left to consolidate under what was, until recently, the *laissez-faire* attitude of the Pentagon. Consolidation has greatly reduced suppliers and bidders. For example, only two major aircraft manufacturers remain to compete for defense contracts. Fewer competitors, combined with a preference for relatively small numbers of systems in great

quantities, does not augur well for innovation, let alone transformation.

The Planning Process

A vision of a dramatic military shift must be supported by action. Yet the DOD process for developing strategy and translating it into planning guidance, and shaping programs and budgets, is broken. The planning, programming, and budgeting system—logical in theory—has declined to little more than an annual budget drill. Defense Planning Guidance is routinely produced too late and also is generally ignored. Its planning scenarios typically reflect a linear extension of cur-

planning scenarios typically reflect a linear extension of current contingencies instead of the transformed environment envisioned by the Secretary and Joint Chiefs

rent contingencies instead of the transformed environment envisioned by the Secretary of Defense and Joint Chiefs of Staff. The inability of this guidance to influence resource allocation is reflected in service budget shares, which have remained astoundingly stable over the last forty years despite changes in strategy, technology, and the geopolitical environment.

Efforts to remedy this problem have encountered limited success. The Joint Requirements Oversight Council, designed to compete programs across service boundaries and emerging mission areas (such as information warfare), has not had an impact on allocation. The Goldwater-Nichols Act of 1986, while promoting jointness, also strengthened the role of unified commanders in chief at the expense of the services. But CINCs, who deal with real threats, have a relatively short-term focus compared to the services, which are responsible for the long-term training and equipping of forces. Ruminations on Capitol Hill over the need to enact Goldwater-Nichols II are indicative of the belief that the process is most in need of change, not the people in charge or budget allocations.

Though formidable, barriers to transformation are not insurmountable. Encouraging signs include a growing interest on the part of Congress. The Chairman has responded to

congressional pressure for joint experimentation by assigning that responsibility to U.S. Joint Forces Command. The Senate Armed Services Committee has created a new Subcommittee on Emerging Threats and Capabilities, partly to monitor progress on transformation. There is also some bipartisan coalition-building for examining a fundamental restructuring of strategic planning, programming, budgeting, determination of requirements, training, and command structure.

Despite the Clinton administration pledge of more funding, a continuing mismatch between the defense program and budget could produce

dramatic change. The Pentagon shortfall, at some \$40 to \$50 billion over the *Future Years Defense Plan*, will likely balloon to \$25 billion per year in the longer term. Readiness shows signs of slipping and force modernization plans are unrealistic. Yet neither political party seems inclined to tap into projected surpluses to provide major funding. Future budgets may not sustain business as usual in the defense posture, offering opportunities to recast the force.

There appears to be general agreement on the need to transform the military from the kind of force that won the Cold War and Persian Gulf War. Yet despite assertions to the contrary, this consensus has not been translated into a supporting program. The causes for a disconnect between words and deeds are varied but are primarily of the defense establishment's own making. Though there is growing support in Congress for change, the critical mass needed to effect it has not been achieved. A new administration may provide the impetus for transformation, but such leadership is hardly assured. Thus one can only conclude that absent a strong external shock, surmounting the barriers will prove a long and arduous process.

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